

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An animal cell expressing a ~~gene coding~~ a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following polynucleotides ~~genes~~ (a) and (b):

(a) a polynucleotide comprising a reporter protein coding region ~~gene~~ connected downstream from a transcription control region, ~~in which~~ wherein said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter comprising the nucleotide sequence of SEQ ID NO: 5 which can function in said cell; and

(b) a polynucleotide comprising a selective marker protein coding region connected functionally downstream of a promoter ~~gene~~ which can function in said cell;

wherein said ligand-responsive transcription control factor is one selected from an aryl hydrocarbon receptor, estrogen receptor, androgen receptor or thyroid hormone receptor.

~~provided that the following gene (c):~~

~~(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having said ligand responsive transcription control factor contacted with a ligand of said ligand responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a)~~

~~is not present in said cell.~~

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an aryl hydrocarbon receptor.

5. (Canceled)

6. (Original) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an estrogen receptor.

7. (Original) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an androgen receptor.

8. (Original) The cell according to claim 1, wherein said ligand-responsive transcription control factor is a thyroid hormone receptor.

9. (Currently Amended) An animal cell expressing an aryl hydrocarbon receptor and an Arnt receptor, and stably transformed with a DNA comprising in a molecule, the following polynucleotides genes (a) and (b):

- (a) a polynucleotide comprising a reporter protein coding region ~~gene~~ connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said aryl hydrocarbon receptor

and a minimum promoter comprising the nucleotide sequence of SEQ ID NO: 5 which can function in said cell and

(b) a polynucleotide comprising a selective marker protein coding region connected functionally downstream of a promoter gene which can function in said cell;

~~provided that the following gene (c):~~

~~(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having a ligand responsive transcription control factor contacted with a ligand of said ligand responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a) is not present in said cell.~~

10. (Cancelled).

11. (Currently Amended) A method for evaluating a chemical substance to have agonist activity over the transcription promoting ability of a ligand-responsive transcription control factor, said method comprising:

- (i) culturing an animal cell according to any one of claims 1, 4 and 6 to 9 in the presence of the chemical substance;
- (ii) measuring the expression amount of said reporter gene protein encoded by the polynucleotide (a) in said cell and
- (iii) assessing said chemical substance to have agonist activity over the transcription promoting ability of the ligand-responsive transcription control factor when the value of expression amount of said reporter protein as measured in the step (i) of

~~said reporter gene (a) introduced into said cell~~ is larger than a measured value of expression amount of said reporter ~~gene (a)~~ protein as measured in said cell cultured in the absence of said chemical substance;

wherein said ligand-responsive transcription control factor is one selected from an aryl hydrocarbon receptor, estrogen receptor, androgen receptor, or thyroid hormone receptor, and expressed in said cell.

12. (Currently Amended) A method for evaluating a chemical substance to have antagonist activity over the transcription promoting ability of a ligand-responsive transcription control factor, said method comprising:

- (i) culturing an animal cell according to any one of claims 1, 4 and 6 to 9 in the presence of the chemical substance and a ligand of said ligand-responsive transcription control factor;
- (ii) measuring the expression amount of reporter ~~gene~~ protein encoded by the polynucleotide (a) in said cell and
- (iii) assessing said chemical substance to have antagonist activity over the transcription promoting ability of the ligand-responsive transcription control factor when the value of expression amount of said reporter protein measured in the step (ii) ~~of said reporter gene (a) introduced into said cell~~ is smaller than a measured value of expression amount of said reporter ~~gene (a)~~ protein as measured in said cell cultured in the presence of said ligand and the absence of said chemical substance;

wherein said ligand-responsive transcription control factor is one selected from an aryl hydrocarbon receptor, estrogen receptor, androgen receptor or thyroid hormone receptor, and expressed in said cell.

13. (Currently Amended) A measuring kit comprising an animal cell according to any one of claims 1, 4 and 6 to 9.

14. (Currently Amended) A method for obtaining an animal cell for measuring the ability to control the activity of a ligand-responsive transcription control factor, said method comprising:

(i) introducing into an animal cell, a DNA comprising in a molecule the following polynucleotides genes (a) and (b):

(a) a polynucleotide comprising a reporter protein coding region gene connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter comprising the nucleotide sequence of SEQ ID NO: 5 which can function in said cell, and

(b) a polynucleotide comprising a selective marker protein coding region connected functionally downstream of a promoter gene which can function in said cell,

wherein said ligand-responsive transcription control factor is one selected from an aryl hydrocarbon receptor, estrogen receptor, androgen receptor or thyroid hormone receptor, and wherein said animal cell being is

an animal cell into which a DNA comprising a ~~gene-coding~~ polynucleotide that encodes the ligand-responsive transcription control factor and that is connected functionally downstream of a promoter is introduced before, after or during the same time of the step (i) or an animal cell that naturally has an ability to express ~~the gene-coding~~ the ligand-responsive transcription control factor; and

~~provided that a reporter gene (c) connected downstream from a promoter which transcription activity is unchanged by having said ligand responsive transcription control factor contacted with a ligand of said ligand responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a), is not present in the cell; and~~

(ii) recovering from the transformed cell obtained from step (i), a transformed cell having said both of the introduced DNA stably maintained therein.

15. (Currently Amended) The method according to claim 14, wherein said cell is an animal cell into which a DNA comprising a ~~gene-coding~~ polynucleotide that encodes the ligand-responsive transcription control factor and that is connected functionally downstream of a promoter is introduced before, after or during the same time of the step (i).

16. (Currently Amended) The method according to claim 15, wherein the DNA comprising a ~~gene-coding~~ polynucleotide that encodes the ligand-responsive transcription control factor, comprises in a molecule, a polynucleotide comprising a selective marker protein coding region connected functionally downstream of a promoter gene which can function in said cell

and which ~~encodes a polypeptide that~~ confers a phenotype different from that of the ~~gene~~
polynucleotide (b).

17-29. (Canceled)

30. (New) The cell according to any one of claims 1, 4 and 6 to 9, wherein said selective marker protein is a protein which can provide the cell with a resistance against chemicals suppressing or disturbing proliferation of the cell.

31. (New) The cell according to any one of claims 1, 4 and 6 to 9, wherein said cell is prepared by introducing said DNA into a host cell selected from NIH 3T3 cell, MCF7 cell or HeLa cell.